WHAT IS CLAIMED IS:

1. A method for applying electrical energy to a structure within a patient's body, said method comprising:

positioning an electrosurgical probe adjacent to the body structure so that an electrode array including a plurality of isolated electrode terminals is brought into at least partial contact with the body structure; and

applying high frequency voltage between the electrode array and a common electrode on or in the patient body.

2. A method as in claim 1, wherein current flow from at least two of said electrode terminals is independently controlled based on impedance between the electrode terminal and the common electrode.

3. A method as in claim 2, wherein current flow is limited when a low impedance path exists between the electrode terminal and the common electrode.

4. A method as in claim 2, wherein current flow is limited when a high impedance path exists between the electrode terminal and the common electrode.

5. A method as in claim 1, wherein the high frequency voltage is in the range from 20 kHz to 20 MHz and in the range from 5 volts to 300 volts (RMS).

6. A method as in claim 1, further comprising measuring temperature at an interface between the electrode array and the body structure and controlling the voltage, current, or duty cycle to maintain a preset interface temperature.

7. A method as in claim 1, wherein the electrode array is present in an electrically conductive environment.

8. A method as in claim 7, wherein the electrically conductive environment comprises saline.

9. A method as in claim 8, wherein the electrode array is positioned against fibrocartilage or articular cartilage in order to ablate a surface thereof.

10. A method as in claim 1, wherein the electrosurgical probe is introduced percutaneously through an access cannula.

11. A method as in claim 1, wherein the isolated electrode terminals each have a contact area below 15 mm^2.

12. A method as in claim 11, wherein the isolated electrode terminals have contact surfaces with an area in the range from 0.001 mm^2 to 2 mm^2.

13. A method as in claim 12, wherein the area is in the range from 0.01 mm^2 to 1 mm^2.

14. An improved method for electrosurgical intervention of the type wherein high frequency voltage from a power supply is applied through an electrode surface contacted against a body structure, wherein the improvement comprises contacting the body structure with an electrode array and independently limiting current flow through individual terminals of the electrode array, wherein those terminals which are connected back to the power supply through low electrical impedance paths will not cause excessive heating.

15. An improved method as in claim 14, wherein high frequency current is supplied independently to each electrode terminal through a current limited power source.

16. An improved method as in claim 15, wherein the voltage, current, or duty cycle applied to all of the electrode segments is commonly controlled to maintain a

preselected temperature at an interface between the electrode surface and the body structure.

17. An electrosurgical probe comprising:

a shaft having a proximal end and a distal end;

an electrode array disposed near the distal end of the shaft, said array including a plurality of electrically isolated electrode terminals disposed over a contact surface; and

a connector disposed near the proximal end of the shaft for electrically coupling the electrode terminals to a high frequency voltage source.

18. An electrosurgical probe as in claim 17, wherein the shaft is generally rigid over at least a portion of its length.

19. An electrosurgical probe as in claim 17, wherein the shaft is flexible over at least a portion of its length.

20. An electrosurgical probe as in claim 19, wherein the shaft is flexible over at least its distal end and further comprising means for selectively deflecting the flexible distal end.

21. An electrosurgical probe as in claim 17, further comprising a common electrode on the shaft, wherein the connector also electrically couples the common electrode to the high frequency voltage source.

22. An electrosurgical probe as in claim 21, further comprising a perforate electrically non-conductive shield over the common electrode.

23. an electrosurgical probe as in claim 22, wherein the shield is spaced radially apart from the common electrode to form a capillary gap.

24. An electrosurgical probe as in claim 21, wherein the electrode array is disposed over the distal tip of the shaft.

25. An electrosurgical probe as in claim 21, wherein the common electrode is a band electrode spaced proximally of the electrode array by a distance in the range from 0.5 mm to 2 mm.

26. An electrosurgical probe as in claim 25, wherein the electrode array has an area in the range from 0.01 mm^2 to 2.5 cm^2.

27. An electrosurgical probe as in claim 19, wherein the isolated electrode terminals each have a contact area below 5 mm^2.

28. An electrosurgical probe as in claim 27, wherein the isolated electrode terminals have an area in the range from 0.001 mm^2 to 2 mm^2.

29. An electrosurgical probe as in claim 28, wherein the electrode terminal area is in the range from 0.01 mm^2 to 1 mm^2.

30. An electrosurgical probe as in claim 17, wherein the electrode array is disposed over a lateral surface of the shaft.

31. An electrosurgical probe as in claim 17, wherein the electrode array is arranged in a linear pattern to act as cutting blade.

32. An electrosurgical probe as in claim 17, wherein the electrode array includes at least four electrode terminals.

33. An electrosurgical probe as in claim 17, further comprising a temperature sensor located in the electrode array wherein the connector also electrically couples the temperature sensor to the high frequency voltage source.

34. An electrosurgical probe as in claim 17, wherein the electrode terminals are spaced-apart from each other by a distance in the range from about one-tenth to one terminal width.

35. An electrosurgical probe as in claim 17, wherein the electrode terminals extend distally of the distal end of the shaft by a distance in the range from 0.05 mm to 1 mm.

36. An electrosurgical power supply comprising:

a multiplicity of independent current-limited current sources;

a common electrode connection; and

a connector which mates with a connector on an electrosurgical probe to electrically couple individual ones of said current sources to individual electrode terminals within said electrosurgical probe.

37. An electrosurgical power supply as in claim 36, wherein the independent current sources comprise current limiting inductors in parallel with each other and in series with a common voltage source.

38. An electrosurgical power supply as in claim 36, wherein the independent current sources comprise current limiting capacitors in parallel with each other and in series with a common voltage source and resistors in parallel with each other and in series with the common electrode connection.

39. An electrosurgical power supply as in claim 36, further comprising a temperature controller which adjusts

output or duty cycle of the voltage source in response to a temperature set point and a measured temperature value received from the electrosurgical probe through the connector.

40. An electrosurgical system comprising an electrosurgical probe and an electrosurgical power supply, wherein the electrosurgical probe comprises:

a shaft having a proximal end and a distal end;

an electrode array disposed near the distal end of the shaft, said array including a plurality of electrically isolated electrode terminals disposed over a contact surface; and

a connector near the proximal end of the shaft for electrically coupling the electrode terminals individually to the electrosurgical power supply;

and wherein the electrosurgical power supply comprises:

a multiplicity of independent current sources; and

a connector which mates with the shaft connector to electrically couple individual ones of said current sources to individual ones of said electrode terminals.

41. An electrosurgical system as in claim 40, wherein the shaft is generally rigid over at least a portion of its length.

42. An electrosurgical system as in claim 41, wherein the shaft is generally flexible over at least a portion of its length.

43. An electrosurgical system as in claim 41, further comprising a common electrode on the shaft, wherein the connector also electrically couples the common electrode to the high frequency voltage source.

44. An electrosurgical system as in claim 43, wherein the common electrode is mounted over the exterior of the shaft and spaced proximally from the electrode array.

45. An electrosurgical system as in claim 4-, wherein the electrode array is disposed over the distal tip of the shaft.

46. An electrosurgical system as in claim 40, wherein the electrode array is disposed over a lateral surface of the shaft.

47. An electrosurgical system as in claim 40, wherein the electrode array is arranged in a linear pattern to act as cutting blade.

48. An electrosurgical system as in claim 40, wherein the electrode array includes at least 6 electrode terminals.

49. An electrosurgical system as in claim 40, further comprising a temperature sensor located in the electrode array wherein the connector also electrically couples the temperature sensor to the high frequency voltage source.

50. An electrosurgical system as in claim 40, wherein the independent current-limited voltage sources comprise current limiting resistors in parallel with each other and in series with a common voltage source.

51. An electrosurgical system as in claim 40, further comprising a temperature controller which adjusts output of the voltage source in response to a temperature set point and a measured temperature value received from the electrosurgical probe through the connector.